Ruthless Principles for Digital Longevity

Stewart Arneil, Martin Holmes, and Greg Newton, University of Victoria Humanities Computing and Media Centre

Project Endings is a SSHRC funded collaboration at the University of Victoria which aims to provide practical solutions to issues attendant on ending a project and archiving the digital products of research, including not only data but also interactive applications and web-based publications. *Endings* is a collaboration between the Humanities Faculty and the Library, and endeavours to align the aims of faculty researchers producing projects and the archivists who will eventually be responsible for curating their work.

Using both practice-based methods and scholarly research, *Endings* is already producing recommended approaches (Holmes 2017; Arneil & Holmes 2017; Holmes & Takeda 2018) and diagnostic tools (Holmes & Takeda 2017) that will assist scholars in ensuring that their project will be completed, archivable, functional, and available well in to the future.

The project has conducted a survey with 128 project leaders, and conducted 28 follow-up interviews to gain insight in to the practical issues faced by DH scholars. Simultaneously it has been actively working on 'ending' several existing in-house projects (The Diary of Robert Graves, Le mariage sous L'Ancien Régime, The Map of Early Modern London, and a number of others) using the a set of principles developed from our work. These principles focus on reducing technological overhead and applying software development best practices to the planning and construction of a project's digital outputs. Our methodology is based on paring back the range of technologies used to the absolute minimum (HTML, CSS and JavaScript), and building completely static web materials with no dependence on any server-side technologies.

The Endings project divides digital projects into five primary components: *data*, *products*, *processing*, *documentation*, and *release management*. We aim at longevity primarily for data and products, but believe that this goal requires careful attention to processing, documentation and release management. We are developing preservation principles for of these factors, and this presentation will discuss key components of the principles along with their justification and practicality.

Many of these principles are uncontroversial. For instance, principle 1.1, "Data is stored only in formats which conform to open standards and which are amenable to processing (TEI XML, GML, ODF, TXT)" would not be surprising to anyone. Others are more demanding and are likely to meet strong resistance from some members of a project team; programmers may be unsettled by the demand that there be "no dependence on external libraries: no JQuery, no AngularJS, no Bootstrap," or puzzled by the requirement that "every page contains all the components it needs, so that it will function

without the rest of the site if necessary, even though this means duplicating information across the site." This "ruthless" set of maxims can make rapid development and deployment more difficult, but the principle of "hard now, easy later" is the only real guarantee of digital longevity for projects which, while they may be curated, are never likely to be actively maintained over the long term.

References

Arneil, Stewart, and Martin Holmes. 2017. "Archiving form and function: preserving a 2003 digital project." DPASSH Conference 2017: Digital Preservation for Social Sciences and Humanities, Brighton, UK. 14/06/2017.

Holmes, Martin. 2017. "Selecting Technologies for Long-Term Survival." SHARP Conference 2017: Technologies of the Book, Victoria, BC, Canada. [https://github.com/projectEndings/Endings/raw/master/presentations/SHARP_2017/mdh_sharp_2017.pdf]. 10/06/2017.

Holmes, Martin, and Joseph Takeda. 2017. "Beyond Validation: Using Programmed Diagnostics to Learn About, Monitor, and Successfully Complete Your DH Project." Digital Humanities 2017 Conference, Montreal, Canada. [https://dh2017.adho.org/abstracts/140/140.pdf]. 11/08/2017.

Holmes, Martin, and Joseph Takeda. 2018. "Why do I need four search engines?" Japanese Association for Digital Humanities Conference, Tokyo, Japan. [https://conf2018.jadh.org/files/Proceedings_JADH2018.pdf#page=58]. 11/09/2018.